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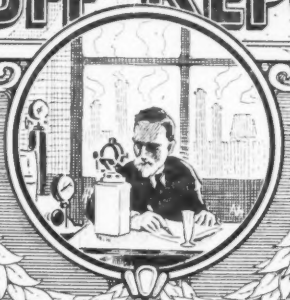

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DYES AND THE TARIFF

W. S. Culbertson Favors Forty-five Amendments Plus Special Presidential Proclamations to Prevent Unfair Competition

DECLARING his personal predilections to be unfavorable towards the adoption of measures similar to the British licensing scheme for the protection of the dye industry in this country, and offering as a substitute the forty-five proposed amendments to the Coal-Tar Chemical Schedule of the Tariff Act of September 8, 1916, backed up by legislation permitting the President to impose additional duties and prohibit altogether the importation of certain dyes and chemicals wherever an attempt to "dump" these goods manifested itself, William S. Culbertson, of the United States Tariff Commission, six days ago told members of the American Chemical Society at Buffalo that the American dye industry was altogether too diversified to warrant direct Federal supervision.

As a further basis for this belief, he pointed out that in Great Britain the firms are comparatively few and the Government is closely associated with them in the enterprise; the Canadian system, he said, although efficient, was "inflexible" and increased the burden on the consumer beyond the point necessary to protect the producer, while in the United States the problems of administration were too vast and the political considerations too uncertain to attempt a solution of the dye problem through prohibition and importation licenses. He proposed that the Tariff Commission, already authorized to investigate "dumping," should pass upon all complaints of this nature and make the recommendations leading to the proposed Presidential proclamations.

At the beginning of his address, Mr. Culbertson declared that the two outstanding general forces that operated during the war to modify and, in some branches, revolutionize the American chemical industry, were the isolation of the Central Powers which cut off their overseas trade, and the enormous demand for chemical products to be used in the prosecution of the war. "The American public," the speaker averred, "now realizes as never before that the chemical industries are in many particulars essential both in the pursuits of war and of peace."

He then recalled the dye famine which followed the last direct shipment of dyes from Germany, March, 1915, and expressed the opinion that this had proved a more potent argument for the diversification of American industries than a "flood of oratory."

"An infant industry came into being," he continued, "and thrived under the protecting influences of the restrictions on the commerce of foreign competitors. The new industry has shown some of the failings of youth, but it cannot be gainsaid that it has met the situation and that to-day the production of intermediates and dyes represents an important American industry."

The speaker then proceeded to trace the effect of the war upon many other less spectacular but highly important chemical products; the future production of these, he declared, was yet problematical, while others will remain a permanent and important part of our industrial life. War restrictions in some cases delayed development or diverted energy—the dye industry, for example, having been hampered by scarcity and high prices of raw materials, especially in the case of toluol, the crude used in the manufacture of T.N.T.

Mr. Culbertson cited a number of changes which have taken place and spoke of the closer business combination among the German chemical industries which has resulted from the war, stating significantly that these will adjust themselves more readily to normal times than will the German textile and steel industries. "The same forces," he said, "which have affected our chemical industries constructively have raised up competing firms in other countries, and an era of severe competition is unquestionably ahead."

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Those portions of his address more interesting to readers of the REPORTER follow:

ADJUSTMENT TO NORMAL TIMES

"No industries, taking the world over, have been as profoundly modified by the war as have the chemical industries. Changes have taken place not only in the United States but in foreign countries. German chemical industries have been drawn into an even closer business combination than existed before the war, and they have doubtless made progress in technical research and mechanical processes. Although they will suffer from the crisis through which Germany is passing, they will adjust themselves more readily to normal times than the German textile and steel industries. In other countries the same influences which established new and expanded old industries in the United States were operating. Norway, Japan, Canada, and particularly Great Britain, have made great progress in many chemical lines and, now that the war demand has ceased, are seeking new markets for their increased productive capacity. The same forces, therefore, which have affected our chemical industries constructively have raised up competing firms in other countries and an era of severe competition is unquestionably ahead. This situation requires, in the first place, a reconsideration of measures of commercial policy, and in the second, a careful investigation of the facts.

MEASURES OF COMMERCIAL POLICY

"Let me turn your attention, then, to some aspects of commercial policy as they relate to our chemical industries. So fundamental were the changes wrought by the war that a measure entirely adequate to pre-war conditions cannot be assumed to meet our present needs. In the field of chemistry the war solved some problems, modified others, and created still others. It is

peculiarly our task to face the new situation squarely and to consider the proper answers to the pressing questions before us. I am sure that you realize better than anyone else that the future of the chemical industries of the United States depends primarily upon the research work of chemists, the designs of engineers, and the organizing skill of business men. *Industries which do not show vitality and growth in these respects should not be maintained by legislation.* With this qualification, however, national policy warrants the enactment of tariff and unfair competition laws which will enable essential and desirable industries to become an effective permanent part of our industrial life. The *laissez-faire* attitude has no place in the reconstruction period.

THE TARIFF ON CHEMICAL PRODUCTS

"Among the most—perhaps the most—urgent tariff problems which Congress will be called upon to consider, fall within the chemical schedule. The reason for this is obvious. The war's effect was, as I have suggested, more revolutionary among the chemical industries than elsewhere. I wish it were possible for me to discuss a number of chemical products worthy of consideration, but this cannot be done within the limits of this address. Not all the items in the chemical schedule have an equal claim to legislative assistance. A few have none. Each should be considered on its own merits, keeping in mind the advantages of production, the availability of foreign supply, the needs of the American consumer, and the diversification and development of the structure of our industrial life. I shall speak specifically of the industry producing coal-tar products, for I regard it as a clear case deserving of legislative help.

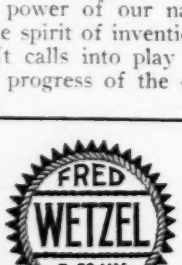
"Before hostilities ceased, Great Britain had declared the industry producing synthetic dyes essential to her national well-being. For its protection she has made a radical departure from her traditional policy of *laissez faire* in trade. She has provided State aid for the dye industry in the form of loans and grants for buildings and research. The importation of all dyes is prohibited except under license granted by a licensing committee. No dye is to be imported which the domestic industry is able to supply or for which an adequate substitute is made in the country. I believe that such a plan has been suggested as desirable for this country. For my part, I cannot regard it with favor. In Great Britain the plan is in the very early stages of experimentation. There the firms are comparatively few and the Government is closely associated with them in the enterprise. In the United States our industry is too diversified and varied, the problems of administration too vast, the political considerations too uncertain to warrant meeting the dye problem with prohibition, importation licenses and direct Federal supervision.

"The alternative is a tariff which will equalize, with a fair margin, the conditions of competition between this country and abroad. The rise of the dye industry has given a new significance to the 'infant-industry' argument for the tariff. In many phases of research and engineering, this industry in the United States is in the experimental stage. The selling of the German patents to the Chemical Foundation, Inc., by the Alien Property Custodian is of great assistance, but we are not as yet in a position to compete on an equality with the old well-established concerns abroad. It is first necessary to determine by tireless and expensive experiment the best conditions for the manufacture of each product and to train a staff to put into effect the results of such experimentation.

"Although American chemists deserve congratulations on their success in making so many varieties of dyes, nevertheless, many important and much needed dyes are not yet being made in the United States. An encouraging sign is that the American dye industry is not slavishly following the methods of Europe. Already, American chem-

ical engineers are installing larger units than were ever used abroad. Mechanical stirrers are replacing hand stirrers and pipe lines are replacing buckets. In the end American mechanical genius will surely bring supremacy in the design and operation of equipment. An insight into the structure of the molecule, such as comes only to a chemist after long training, is necessary to make new dyes which will surpass the products of nature in quality. The rapid progress of this new dye industry is sufficient proof that America possesses chemists of a caliber to win success in this more difficult field. The American industry, however, cannot be expected to do in four years what Germany has done in forty years.

"During its development even the advocate of free trade would admit that the new industry is entitled to legislative consideration. Assistance to the dye industry may also be justified, from a national standpoint, on the ground that the industry is essential to both our military and industrial organization. It is well known that the preliminary processes for making certain dyes and high explosives are identical, and that the machinery and technical staff of a dye plant may, with comparative ease, be turned to the production of explosives. The war has taught us also that it is not a wise policy to have our great textile and other dye using industries rely wholly on foreign sources for their dyes. Finally, I regard the dye industry as necessary to the normal development of our industrial life. Diversification of industry develops the productive power of our nation. It awakens the spirit of invention and enterprise. It calls into play latent talents. The progress of the dye industry has demonstrated how these conditions come about, and I believe that we should recognize and maintain the industry as a desirable and permanent part of our industrial structure.



Unfair Methods of Competition

"A tariff designed to maintain American industries—not only the dye industry, but others equally entitled to consideration—should be supplemented with laws carefully devised to prevent unfair attacks on them against which a tariff, unless it is prohibitive, affords no safeguard. A reasonable tariff and adequate legislation against dumping and other unfair practices go together. Unfair competition—commercial bribery, deceptive labeling, full-line forcing, and other practices—can be prevented by our courts and particularly by the Federal Trade Commission in all cases where the offending parties can be reached by legal process. It is not these cases which are grounds for concern. It is those directed by individuals in foreign countries beyond the jurisdiction of our domestic tribunals. Dumping, that is, selling in this country at a price less than that which prevails in the country from which the goods are exported, and similar practices can often be dealt with only by means of additional tariff duties or prohibition. For years our law has provided for countervailing duties to be levied on bounty-fed products which are imported into the United States. These afford protection against one form of dumping.

In the Act of September 8, 1916, a provision for a double duty, to be assessed against goods imported under a full-line-forcing agreement was enacted. At the same time an attempt was made to deal with the dumping evil. It was declared criminal to dump goods systematically into the United States with the intent of destroying, injuring or preventing the establishment of an American industry. But some additional measures are needed.

"Canada was a pioneer in the enactment of anti-dumping legislation. Her

act provides that in case articles exported to Canada of a kind made or produced in Canada, if the export or actual selling price to an importer in Canada be less than the fair market value of the same article when sold for consumption in the country whence exported, there shall in addition to the regular duties be levied, collected and paid a special duty. Effective administrative machinery had been devised for enforcing this law. It is comparatively simple and in Canada has proved effective. It is, however, inflexible, and tends to increase the burden on the Canadian consumer beyond the point necessary to protect the Canadian producer.

"Another method for handling dumping is suggested by the inadequate American legislation of 1916. In order to be effective this law should be modified both in substance and procedure. At the present time it prevents only those forms of dumping wherein the intent of the foreigner is to destroy or injure, or prevent the establishment of an American industry. It should cover, however, not only such intentional unfair acts of foreign competitors, but also all selling in the United States at prices below those that prevail generally abroad. When an American producer is injured it makes no difference to him what the intent of the foreign rival is. Only the result is significant. In procedure, also, this law of 1916 should be more flexible. At the present time the law makes criminal the type of dumping which it prohibits and places its administration under the Department of Justice. There are objectionable cases of dumping, however, which cannot be proved under the strict procedure of criminal law. Nor is it always possible to bring the offending party before our courts as he may be in another country.

"The criminal provisions of the law should be supplemented by a law which would authorize the President to levy by proclamation additional duties on goods which are being systematically dumped into the United States, or to prohibit their importation, in case he has reason to believe that the result will be to injure, destroy or prevent the establishment of an American industry. The law might also be made to cover other unfair practices such as full-line forcing and deceptive labeling. The United States Tariff Commission, already authorized to investigate dumping, should be designated to hear and consider complaints and to report its findings to the President for his consideration and action. A law containing these provisions would be more flexible than the Canadian method. It could be adapted in its administration to meet effectively every objectionable case.

"This power to prevent unfair practice by proclamation at the discretion of the President, together with the power of the Federal Trade Commission to prevent all unfair methods of competition done by persons who can be reached by legal processes, should provide sufficient security for American industry and prevent effectively all unfair attacks upon it."

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EDISON ON PRICES

The recent advice given by Thomas A. Edison to American business men, now free from the abnormal conditions induced by the war, should be of interest to dye manufacturers and consumers alike. Mr. Edison said:

"Don't hesitate; go ahead now. The buying public is hungry for goods of all kinds. The purchasing power of the public is enormous. The only danger is the business man who thinks he is 'long-headed' and hangs back when he ought to go ahead. *The man who lets his business run down waiting for prices to reach their lowest level is likely to lose a great deal more than he gains, and the percentage is greatly against him.*"

These are good words. They come from a veteran in experience and are the product of a mind such as is given to only a few men in each generation. It is not as though Mr. Edison had never himself encountered failure. During the course of his long career he has met, at various times, with setbacks enough to discourage almost anyone; yet his own unflagging optimism and faith in the power of close application to whatever the particular task on hand might be led him to plunge with renewed energy and spirits into the struggle—with what results the world knows.

He should indeed, therefore, know whereof he speaks, for he has never lost his grip on American business affairs during the sixty-one years that he has been engaged in making his own living. And Mr. Edison says that to "sit around" waiting for the other fellow to lower his prices, the while complaining bitterly that business has gone to the eternal bowwows, is to court bankruptcy proceedings.

Many American consumers of dyestuffs are doing precisely this thing. One has only to question a few of them in order to hear a tirade against the alleged profiteering of the dye people, to say nothing of others who supply them with the raw materials used in their manufactures. Meanwhile, some are letting their businesses run down from sheer lack of exercise. They are waiting . . . waiting . . . for dye and other prices to come down—with thousands of soldiers returning from France and requiring new civilian outfits—and the retail prices of everything in the textile line jumping upward to beat Nancy Hanks. Something must be wrong with merchandising methods when makers of such essentials as wearing apparel say they cannot dispose of their goods and must, perforce, close up their mills through lack of orders.

No, that is not the trouble. They are hoping against hope that prices on materials used by them, including dyes, will come down, and meanwhile they intend to hold out as long as possible and keep things slowed up until the break comes. If this is persisted in, the break may come, sure enough, but hardly in the hoped-for way. It appears to us that it would be the part of wisdom for them to take a tip from Edison and quit malingering. It doesn't pay.

Referring to the recent prohibition of the importation of dyes into Australia, Ernest Hall, representative of that commonwealth, declared that any dyes at present on the water, or which will be actually shipped from the country of export before June 1, in execution of orders placed prior to February 26, will be admitted. It has also been made known that the report that Australia has prohibited the importation of all save British products, is incorrect, being the result of confusing an order of the Australian Government limiting the importation of dyestuffs.

THE FUTURE OUTLOOK FOR FRENCH DYE AND CHEMICAL MARKETS

By Consul William H. Hunt, Saint-Etienne, France

The numerous letters received at this consulate relative to the market outlook for American-made chemicals and dyestuffs at the close of hostilities, have prompted the preparation of the following report, embodying simply a few facts noted during my interviews with divers competent persons on the subject, especially with reference to German methods of handling the chemical trade in France.

Following the example of its Allies, America and England, the French Government has endeavored to create a national chemical industry to combat the monopoly which Germany has controlled in these industries throughout the world, and to free the French textile and other trades from a particularly onerous vassalage. The Government's efforts resulted in the organization on January 31, 1917, of "La Compagnie Nationals des Matieres Colorantes et des Produits Chimiques," with a capital of 40,000,000 francs.

The financial statement showing the company's activities since its organization indicates rather the difficulties encountered than results obtained, and it is believed that the company will not be able to cope with the country's needs for many years to come, even with the aid of existing chemical industries, and that French consumers of chemicals and dyestuffs must look to America for such products.

The following facts concerning the chemical trade in France, prior to the outbreak of the war, clearly show the necessity of importing these products formerly obtained from Germany: According to official statistics, Germany exported annually to France 61,292,000 francs worth of chemical products, consisting largely of artificial dyestuffs; to the above figure should be added the value of such products manufactured in France in German subsidized laboratories, directed by German chemists, in order that German products might escape import duties and cost of transportation, and under the guise of French firms could take part in bids for Government contracts.

These German chemical works, seven in number, were established in the following French cities:

Neuville-sur-Saone.—Works of the Badische Anilin & Soda Fabrik of Ludwigshafen.

Tremblay, near Creil.—La Compagnie Parisienne des Couleurs d'Aniline, a branch of the Farbwerk Meister Lucius & Bruning of Hoechst-on-Mein.

Flers, par Croix du Nord.—Works of the Farbenfabrik Fried. Bayer & Co., of Elberfield.

St. Fons.—Works of the Aktiengesellschaft fur Anilin, Berlin products.

Montereau—Works of the firm Merck, of Darmstadt, specializing in pharmaceutical drugs.

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Lyon.—"La Manufacture Lyonnaise des Matieres Colorantes," a branch of the Casella Company Works of Mainkur.

Tourcoing.—The branch of Weiler-Meer, of Urdingen.

The above-mentioned concerns acquired a preponderant situation that was consolidated by their relations with the head firms in Germany, while their products were consumed by four-fifths of the French consumers of chemicals and dyestuffs.

It was not solely by the low price of their products that the Germans held the supremacy in these industries, but also in having at their disposal a large staff of carefully selected technicians and savants, marvelously equipped for scientific research work. They applied themselves to the industrial realization of the discoveries of French chemists (the honor of having discovered coal tar belongs undoubtedly to the French chemist Bechamp) as well as their own. They exerted every effort regardless of expense to solve difficulties, and in many instances advised the substitution of one product by another, and if need be, gave the exact composition of the baths, and submitted annually carefully prepared color cards (wool, silk and wool, wool and cotton, cotton, etc.) with the proportions to be employed.

Every year they made inquiries among the principal groups of chemicals and dyestuffs consumers (silk, woolen, dyeing and bleaching syndicates, the Chambers of Commerce of Rheims, Sedan, St.-Etienne, Roanne, Louviers, Elbeuf, etc.) to learn their needs and to satisfy them.

These methods of operating require large capital, and the French chemical manufacturers, who often seek quick profits rather than returns resulting from voluntary sacrifices, do not deem it advisable to imitate the German methods. The value of such methods may be easily estimated from the fact that the Badische Anilin paid a dividend of 30 per cent in 1911, while the Farbwerk of Meister Lucius & Bruning, with a capital of 36,000,000 marks, realized a profit of 16,135,196 marks, and also paid a dividend of 30 per cent.

The secret of the German success in all commercial and industrial activities, particularly to the chemical and dyestuffs branches, seems to lie in the fact that they realize that it is preferable to personally investigate the conditions, needs and business methods in foreign markets as well as to select active agents who are thoroughly familiar with the local needs and commercial customs of the people with whom they desire to do business.

The bond of sympathy between France and America, becoming daily more intimate, the high opinion the French have of our industrial methods, the knowledge of our progress in the domain of chemistry, and the results obtained, are so many factors which will contribute to the successful introduction of the American chemical products into France after the close of the war.

HYGROSCOPIC PROPERTIES OF TEXTILE MATERIALS

By Th. Schloesing Fils

A Report Made to the Societe d'Encouragement pour l'Industrie Nationale, Paris, France.

General. Textile materials possess very marked hygroscopic properties. Exposed to the air after being dried, they become charged with relatively large quantities of moisture. The reason for their behavior in this respect is well understood; they are necessarily composed of very slender filaments, exposing a large surface and consequently calculated to promote the condensation of a large proportion of vapor.

The trade in textile materials and still more the industries which manipulate these materials have a strong interest in knowing what quantity of water the materials absorb or retain under given conditions. It is my purpose to give precise data regarding this subject. Apart from the practical side of the question, my investigations may perhaps prove of some value in the general study of hygroscopic property of materials.

The quantity of water that a hygro-

scopic material in equilibrium with the surrounding air contains is a function of two variables: The relative humidity of the air and the temperature. This is doubtless well known to the greater number of physicists and chemists, but is less generally known than is commonly supposed, for requests are frequently made to have the humidity of this or that substance determined without giving the value of the two variables on which this humidity actually depends. We find for example in recent books statements that silk in a dry room retains such a percentage of humidity; and the exact figure is given without any reference to the relative humidity or the temperature of the air. Now in a room called dry, the relative humidity, as well as the temperature, may vary within wide limits, causing, as we shall see, the degree of humidity in silk to vary from one to two or three fold. There are also writers who speak of the natural humidity acquired by cotton exposed to the air and state the exact degree, as if it could be determined regardless of other factors. Such writers illustrate the need of directing attention to the conditions on which the humidity of textile materials depends, and to determine those conditions.

When, therefore, an equilibrium of humidity is established between a hygroscopic material and the surrounding air, there is at each temperature a relation between the moisture in the material and the relative humidity of the air, so that a given value for the latter corresponds to a certain value for the former. It is this relation that I have studied.

Methods Employed. Following is one of the tests to be made:

The substance to be examined and the air are brought into contact until an equilibrium is reached, that is, until there is no further transfer of moisture between the air and the material. The humidity of the material and that of the air are then determined. There are several ways of carrying on these experiments: 1. Bring the air to the point of equilibrium by passing it through a relatively considerable weight of the material of which the humidity does not vary sensibly. 2. Bring the material to the point of equilibrium by exposing a small quantity of it to air having a known degree of relative humidity.

It will be sufficient for me to indicate briefly how I conducted these experiments.

I carried out the first method in practically the same way as in making earlier experiments with tobacco, which are reported in the records of the Academy of Sciences. A metal cylinder from 50 to 60 mm. in diameter, and 1.25 m. long, placed in a water-bath, which is maintained at a constant tem-

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perature for each experiment, is filled with the material to be studied. A gentle current of air is passed through the tube from top to bottom. During this passage, the air and the material reach an equilibrium of humidity; upon being removed from the cylinder, the air is divested completely of humidity in an absorbing tube containing fuming sulphuric acid, and is then passed to a gasometer where it is measured exactly. Its relative humidity is then determined from the weight of the moisture left in the absorber. The humidity of the material is also carefully determined. This humidity may decrease or increase slightly during the experiment at the upper part of the tube, which comes first in contact with the current of air; but, otherwise it does not change. The degree of humidity in the center and at the lower part of the tube is accepted.

This experiment having been completed as described, a double series of experiments are made by varying successively the humidity of the substance and the temperature. In this way the desired relation is determined for each temperature studied.

Some observations on this first method will be useful.

The temperature of the bath surrounding the materials being tested is regulated by a thermostat, and does not vary more than two or three hundredths of a degree during the experiment; the temperature is maintained uniform throughout the bath by the continual agitation of the water by a strong current of air.

The tubes in which the material is placed should not be too large, so that the temperature of inside the tubes may be the same as that of the bath notwithstanding the current of air of a different temperature.

The bath which I have used contained four tubes, which communicated with an absorber and a gasometer; this made it possible to carry on four experiments at one time.

It is necessary to bring the material to be tested near to the degree of humidity that has been determined in advance. With this object in view, a homogeneous lot of material is obtained and the humidity determined by experiment. If the material is to be dried more or less, it is spread out in an oven at a temperature of 30 deg. or 40 deg. Cent. until it has lost the determined proportion of weight. If, on the contrary, it is to be made more moist, it is exposed to humid air in an enclosed chamber, not ventilated, until the desired weight has been obtained. When brought to the desired degree of humidity, the various parts are well mixed, and it is then enclosed in a receptacle such as a glass bell, and hermetically sealed, where it is left long enough for the moisture to become uniformly distributed through the material.

In order to determine the final humidity of the materials, that which it possesses when an experiment is completed, the tubes are emptied and three samples are taken from the lower part of the contents of each of the tubes. These samples are immediately placed in glass receptacles fitted with ground glass stoppers, and which can be weighed before and after drying. The last named operation is carried on in an oven at a temperature of 110 deg. Cent., which is maintained for five or six hours because during their stay in the oven the materials are not removed from the glass cases, which are simply uncorked; and, consequently, the removal of the water is rather slow.

The second method by which the material to be tested is brought into contact with air possessing a given degree of humidity until an equilibrium is reached, is carried on in different ways. I have employed a process similar to that which Regnault described in con-

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nection with his verification of hair hygrometers. The samples to be studied are suspended in tubes tightly closed and at the bottom of which are various solutions of sulphuric acid of known strength, the latter regulating the condition of the atmosphere of which the exact relative humidity, according to the experiments of Regnault, is known. At the end of several days the humidity of each sample is determined. As the strength of the sulphuric acid solutions may have changed slightly during the experiment, the exact composition is finally determined by means of standard solutions of carbonate of soda.

I have employed both methods. The first appears to me to be preferable. It requires more apparatus, operations, calculations and time; but it is, I think, more exact, because the weight of the material tested is greater. The second method has served simply to verify the results of the first, that is not exactly, but in a general way, for the purpose of determining that there are no notable and systematic errors.—*Textiles.*

DYE MANUFACTURERS UP IN ARMS TO PREVENT DUMPING

We reprint, practically verbatim, the recent dispatch from a Washington correspondent of the New York *Evening Mail* to his paper regarding developments in the fight to protect America's dye industry from the threatened onslaught of the Hun and his allies:

Fearing that cunning Teutons will find a way to defeat the announced purpose of the Alien Property Custodian to keep German dyes out of the country, pending the conclusion of peace, American manufacturers of chemicals have determined to ask that an absolute embargo be placed on the importation of German chemicals until Congress makes provision for the permanent protection of the industry.

The ball has been set rolling by the Du Ponts, whose representatives got in touch with the Tariff Commission and with other governmental bodies concerned in imports and exports. The fact that under the ruling of the War Trade Board, which opens German Austria to American commerce, dyes may be imported, is said by the dye manufacturers to be in itself disquieting.

License Protects Patents

Importers will be provided with forms upon which they can apply for licenses permitting them to bring dyes from German Austria to the United States. These forms are such as to obligate the dealers to refrain from importing any dye which clearly infringes the patents now held by the United States, but which were formerly the property of German subjects.

It is pointed out, however, that the dyes which the Germans expect to send here by way of German Austria are made through alleged new processes recently patented at Berlin and at Vienna. It is not believed that, should

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licenses be obtained for the importing of such dyes, the decision of the alien enemy custodian will apply. The mere fact that dyes can be imported, if licenses are obtained, presents a peril to the trade here which the Du Ponts say should not be ignored.

Tariff Commissioner Culbertson said the duty on dyes was altogether insufficient to protect the new industry from ruinous foreign competition. In this conclusion he is strongly supported by Representative Fordney, chairman of the ways and means committee in the new Congress; Representative Mann, Representative Longworth and many others. Mr. Fordney has asked Commissioner Culbertson to assist him in the preparation of a measure designed to protect the infant but lusty American enterprise.

Enemy Wants Market Back

"Under the ruling of the War Trade Board," said Commissioner Culbertson, "there is nothing to prevent the importing of dyes which do not manifestly infringe the patent rights of Americans. Of course, a license may be refused the importers, but the fact that it can be granted is sufficient to alarm the dye manufacturers of the United States.

"This new industry, the outgrowth of the war, should receive the support of the Government and people of the United States. There is not the slightest doubt of the determination of the Germans to recapture the dye markets of the world. They must be prevented from doing this. What kind of a campaign of camouflage they will carry on may be judged from what they have done in the past."

Will Appeal to Wilson

A resolution asking the President and the inter-allied trade commission to place an embargo on the importing from Germany of dyes of every kind until the future policy of the nation can be settled, is being prepared. Even if the policy of the enemy alien property custodian is permitted to stand, it will only prevail until peace is formally declared, the dye men point out.

But in the meantime, unless an embargo is placed on this particular commodity, there is distinct danger that so much of it will be brought here as to imperil the industries which have been built up in the past four years.

Among a number of Germans sent to Fort Oglethorpe, Ga., for internment recently, were Adolph Henry Ney, a chemist once connected with the Thomas A. Edison forces; Herman C. A. Seebohm, former secretary and treasurer of the Bayer Company, and Arthur Wiener, a witness at the recent O'Leary trial.

The Onondaga Hotel, Syracuse, was the scene recently of a dinner given by the Syracuse Chemical Society and Technology Club in honor of Dr. E. S. Johnson, of the United Color & Chemical Company, Boston.

A limited number of samples received for analysis, and working formulae furnished for their reproduction.

Confidental advice to chemists, superintendents and assistants, on matters pertaining to the industry.

Dr. Charles B. Davis
Care of American Dyestuff Reporter
469 West 152nd St., New York City

INQUIRY DEPARTMENT

All classes of chemical work or advice relating to artificial colors, natural dyestuffs, dyewoods, raw materials, extracts, intermediates, crudes, or dyeing chemicals and accessories in general, will be carried out for readers and subscribers of the AMERICAN DYESTUFF REPORTER by this department.

Inquiries of a minor character will be answered on this page, while major matters involving personal investigation, analyses, perfected processes and working formulas, will, if desired, be treated confidentially through the mails. All questions, materials for analysis or letters leading to the opening of negotiations for special work will receive prompt attention if addressed to Inquiry Department, American Dyestuff Reporter, 470 Fourth Avenue, New York City.

A. G. D.—Question—What is "The dye of weld and dyer's broom"?

Answer—This is one of the flavone group known as Luteolin, or 1:3:3':4'-tetrahydroxyflavone. Other members of the same group are Chrysin and Morin.

W. I. D.—Question—We received the working formula for the manufacture of Bismark brown, and same is now in successful operation. Will you kindly give us an outline of the preparation of Martius' yellow?

Answer—Martius' yellow is the sodium salt of 2:4-dinitro-a-naphthol, which latter is obtained by the action of nitric acid upon monosulphonic acid or disulphonic acid of a-naphthol.

C. A. M.—Question—The method which we have been using for some time, and of which we wrote you some time ago, is not giving success with all types of diazo compounds. Will you kindly explain this and send some information on the subject?

Answer—The trouble is in the fact that the aliphatic and aromatic diazo compounds are differently constituted, and hence the methods adopted for their determination are not identical. The required data will be forwarded you.

S. T. G.—Question—Under separate cover we are sending you four coal-tar crudes the names or composition of which we are no longer in possession of. Will you please identify same, the charge for which will be forwarded by return mail?

Answer—The sample marked "A" is Benzidine sulphate; "B," Nitrotoluol; "C," Monochlorbenzol, and "D," Phenylalphanaphthylamine.

H. H. K.—Question—The leaden bottom of our acetic acid retort has become badly pitted. Can you inform us as to the cause of this?

Answer—Please forward some scrapings from the interior of your retort bottom and we will ascertain what has come into contact with the lead to cause the defect mentioned. No doubt some foreign metal has become amalgamated with it.

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We urge that the Textile Industry support the stand of the American Dyestuff Reporter for an American Dyestuff Industry.

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NOTES OF THE TRADE

With an estimated loss of $80,000, the coke plant of the General Chemical Company, located at Fayette City, Pa., has been destroyed by fire.

Under the laws of California, the Anglo-California Aniline Corporation has been incorporated with a capital of $200,000. Head offices will be located in San Francisco, and the incorporators are L. M. Olds, J. R. Daniels, T. A. Keogh and J. T. Thornton and A C. Dnerr.

The American Cellulose and Chemical Manufacturing Company, Ltd., has been incorporated under the laws of Delaware with a capital consisting of 100,000 shares of preferred stock with a par value of $100 each, 150,000 shares of common stock, no par value, and an active capital consisting of 10 shares common stock. The representative of the new company is J. A. Larkin, 681 Fifth Avenue, New York City.

Recent figures reveal that just before the war Germany sold in China synthetic indigo to the value of nearly $10,000,000 a year, and aniline dyestuffs worth from three to four millions more.

P. S. Tilden, of E. I. du Pont de Nemours & Company, has been elected president of the newly organized Institute of Dry Color Manufacturers. Edward Kohnstamm has been chosen vice-president and Marcus Marks treasurer.

The Merrimac Chemical Company has declared a quarterly dividend of $1.25 per share, payable March 31 to stock of record March 22.

The Verte Color Corporation has been incorporated under the laws of New York with a capital of $25,000 to deal in chemicals, drugs, oils and colors. Headquarters will be in Brooklyn, and the incorporators consist of H. C. Ackerman, Great Neck, L. I.; J. C. Ackerman, Closter, N. J., and J. Greenfield, 58 Avenue C, New York City.

Bowman, Mell & Company, manufacturing chemists, of Harrisburg, Pa., recently sustained a fire at the plant of the company. The estimated loss has not been made public.

With a capital of $100,000, the Frostel Chemical Company has been incorporated under the laws of New York to act as manufacturing and consulting chemists. Headquarters will be in New York City, and the incorporators are K. P. Dayton, Chicago, Ill.; E. Perry, 95 William Street, New York, and W. L. Herstein, 31 East Thirty-first Street, New York.

To manufacture textiles, the Black Knitting Mills, Inc., has been incorporated under the laws of New York with a capital of $25,000. Headquarters will be located in Manhattan, and the incorporators are C. E. Black, L. A. Black and S. W. Schwartz, 131 Wooster Street, New York City.

In hoc signo vincimus

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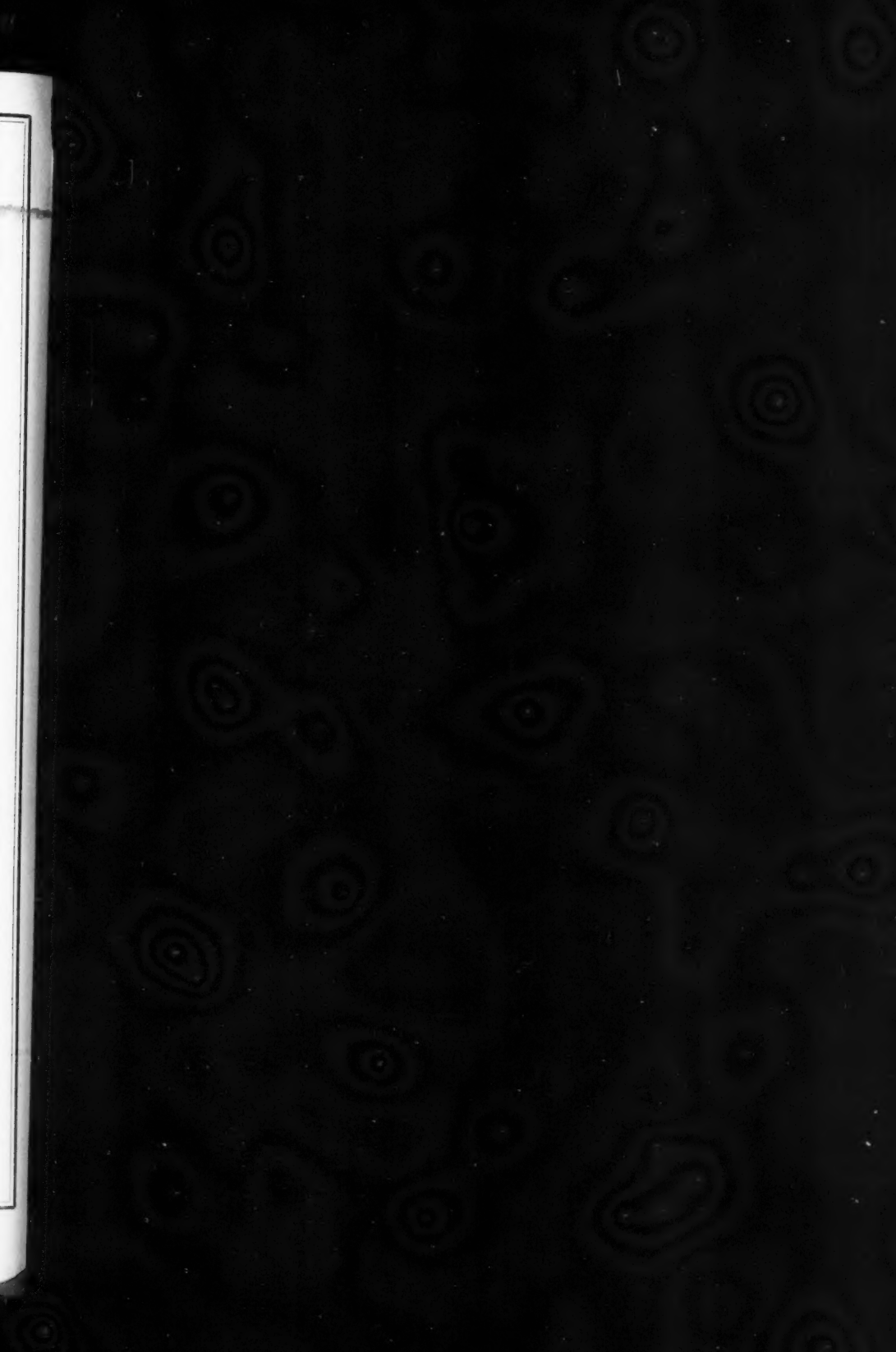
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